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ABSTRACT

This paper describes the design and implementation of a staff-development program at Vivian Field Junior High School in Carrollton, Texas. The school is a member of the Texas Partnership School Initiative, which was created to give schools latitude in raising student achievement. The goal of the staff-development program was to identify gains in student achievement and to close the performance gap among student ethnic and socioeconomic populations. The primary focus was on schoolwide implementation of cooperative-learning strategies, followed by three collegial-coaching sessions. This paper describes the implementation process, which involved teacher-training sessions, administration of a pre- and post-survey, teacher self-evaluations, and five classroom observations. A conclusion is that, as a partnership school, the staff of Vivian Field Junior High School is committed to achieving the partnership's goal through cooperative learning and collegial coaching. Appendices contain the Texas Assessment of Academic Skills (TASS) summary reports for Vivian Field Junior High, copies of the two surveys, teacher comments, brief descriptions of three cooperative-learning models, and a staff-development evaluation report. (Contains 45 references.) (LMI)

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A STAFF DEVELOPMENT PROGRAM DESIGNED TO REACH THE PARTNERSHIP SCHOOL'S GOALS: COOPERATIVE LEARNING STRATEGIES, COACHING SESSIONS AND A NARROWED ACADEMIC PERFORMANCE GAP AMONG STUDENT POPULATIONS

Kathy Cook
Chair & Math educator
Vivian Field Jr. High
Carrollton, TX
Graduate, ELDR masters

PJ Karr-Kidwell, Ph.D.
Professor, Educational Leadership Dept.
Texas Woman's University
Denton, TX

*For notification on our manuscript status, please use professor's home address (not teaching summer terms)--Rt. 4, 3804 Red Oak Drive, Corinth, TX 76208. SASE enclosed with cover letter.

(May 1993)

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PREFACE

In the College of Education and Human Ecology at Texas Woman's University, our students in masters programs typically enroll for at least two semesters to develop a professional paper. In some cases, they may elect to develop a thesis. Since these requirements are fulfilled near the end of their programs, professional interests at diverse work sites are often pursued for topic developments. Although the thesis options exist at many universities and colleges, the development of a required professional paper is rather unique; most programs have additional course work for the masters of education.

Choices for this professional paper may relate to literary reviews and recommendations, product developments, staff development or training programs, case studies, and other areas. The majority of graduate students in our Educational Leadership Department at the masters level complete professional papers. They are frequently encouraged to disseminate insights on program developments, timely recommendations, or findings through such clearinghouses as ERIC. Many of their "school reform" endeavors and accomplishments are shared with colleagues at a respective district or school. However, further dissemination of these projects might be of special interest to other professional educators, counselors, and administrators.

ACKNOWLEDGEMENTS

I would like to express appreciation to my committee for their review of my paper. Thanks to Dr. Stone, Dr. Barbour, and Dr. Karr-Kidwell. A special thank you to Dr. Karr-Kidwell for her kind words and unending enthusiasm. She was always able to find humor to keep me at my best.

I would like to thank my colleagues at Vivian Field Junior High School for their help with the staff development and the continued follow-up.

Most of all I want to express my love to my husband T.A. who would get up at any hour of the night and drive me to the library. If he had required nourishment during these months, I could not have met my deadlines. Thank you for your sacrifices.

I am dedicating this paper to my mother who has supported all of her children in their unique endeavors.

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CHAPTER I

INTRODUCTION

Cooperative learning is a structured teaching technique in which heterogeneous groups of students work collaboratively in pursuit of a common academic goal (Johnson & Johnson, 1993; Johnson, Johnson, & Smith, 1991; Slavin, 1983; Wells, 1989). The primary goals of cooperative learning are: attaining higher achievement through higher order thinking skills (Rottier & Ogan, 1991; Slavin, 1983), developing effective social and leadership skills (Johnson, Johnson, & Holubec, 1991), enhancing students' self-esteem (Fan, 1990; Schmuck & Schmuck, 1975), and increasing time-on-task through active, engaged student group learning (Cohen, 1986; Glasser, 1990). For example, different students might prefer cooperative group learning because they comprehend better and remain on task longer in groups, allowing them to achieve academically.

National school reformers have used cooperative learning to affect the achievement levels and social skills of students. In Texas, the commissioner of education has created the Partnership Schools Initiative for schools to become risk-takers with the goal of raising students' achievement levels (Meno, 1992). In Carrollton, Texas Vivian Field Junior High School, a Texas Partnership School, is implementing cooperative learning as a means to achieve greater student achievement.

Statement of the Problem

A learning gap exists among student ethnic and socioeconomic populations which could be narrowed by raising the low-end scores to a seventy percent mastery level while encouraging the students above the benchmark to continue their improvement with the use of cooperative learning groups (Slavin, 1989). Students in cooperative learning groups interact freely with each other and with the teacher, virtually eliminating any preset societal barriers (Joyce, 1991). This openness toward learning helps narrow performance gaps between student populations, permitting students to experience academic successes (Braddock, 1990; Cohen, 1986). In order to utilize cooperative learning effectively in the classroom, however, teachers need to be exposed to the positive outcomes of this method of teaching, then trained in the implementation of the program (Manning & Lucking, 1991; Sapon-Shevin, 1990). Several school districts across diverse states such as Lousiana, Michigan, Utah, New Jersey, and Kansas, continue to use cooperative learning to address the learning gap existing within their schools.

The learning gap which currently exists between student ethnic and socioeconomic populations in Carrollton Farmers Branch Independent School District (CFBISD) in Texas needs to be narrowed. Since research illustrates that cooperative learning is effective in raising student achievement (Fan, 1990; Johnson, Johnson, & Smith, 1991; Slavin, 1983),

CFBISD began the initial implementation in their Partnership Schools. A problem with this implementation is time. Teachers must be surveyed, trained, and reviewed with classroom visits and follow-up meetings. In these follow-up meetings, teachers not only need to review their cooperative teaching techniques but also analyze the effectiveness of cooperative learning on student achievement.

Statement of Purpose

The purpose of this paper was to design and implement a staff development program for fifty secondary school teachers on strategies for reaching the Carrollton Farmers Branch I.S.D. Partnership School's Goal. The goal was to reveal initial gains in student achievement, and to close the performance gap among student populations, through cooperative learning in all subjects. As reported in this paper, the primary emphasis was school-wide implementation of cooperative learning strategies followed two weeks later by three collegial coaching sessions. During the classroom visits, the author observed cooperative groups and discussed student gains with the cooperating teachers.

Limitations

The primary limitation of this staff development program was the allocated amount of time to train the teachers, therefore limiting the number of cooperative learning techniques which could be covered. Another concern was the degree to which teachers would consistently use

their improvements from training in cooperative learning in their daily classes. The time available for follow-up collegial coaching sessions was limited and placed constraints upon the number of classroom observations.

Definitions

Collegial coaching: teachers observing fellow teachers for the purpose of collecting data to improve teachers' classroom techniques. In particular at Vivian Field, teachers replaced the Texas Teacher Appraisal System with collegial coaching.

Cooperative learning: structured teaching techniques in which heterogeneous groups of students work collaboratively in pursuit of a common goal, with the teacher serving as the classroom facilitator.

Heterogeneous groups: mixed student groups, utilizing diverse categories such as sex, ethnic background, socio-economic level, and academic achievement level (Good & Brophy, 1987).

Performance gap: for the purpose of this paper learning gap and achievement gap are used synonymously with performance gap. As a Partnership School, the learning groups are viewed as ethnic and socioeconomic groups for data collection and analysis.

Partnership School: school which develops a partnership among the state, the school, higher education, the parents, the community, the teachers, and the students to reach the goal

of increased performance of all students (Meno, 1992; Ryan, 1976). For the purpose of this paper, Vivian Field Junior High School, a Partnership School chosen in January, 1992 was used.

Jigsaw II: a cooperative learning technique in which students read a common narrative but then each student in the group is given a separate topic on which to become an expert (Slavin, 1983).

Teams-Games Tournament: requires students to work together in four to five member heterogeneously grouped teams to help one another master content and prepare for competitions against other teams (Good & Brophy, 1987).

Learning Together: calls for students who differ in achievement levels, sex, race, or ethnicity to work together in small groups on assignment sheets. The group would turn in only one assignment sheet (Johnson, Johnson, Holubec, & Roy, 1984).

Student Teams-Achievement Divisions: allows heterogeneously grouped students to work together in four or five member teams to help one another master content and prepare for a quiz over the material (Slavin, 1983).

Team-Assisted Individualization: is an adaptation of individualized instruction that introduces cooperative learning methods and team competition with group rewards (Slavin, 1983).

CHAPTER II

Review of Related Literature

Simply placing students in groups and telling them to work together does not mean that they know how to cooperate or that they will do so even if they know how (Johnson, Johnson, & Holubec, 1991). Seating students near each other and telling them they are a group does not produce cooperation or the higher academic achievement typically found in cooperative learning groups (Slavin, 1983).

There are ways in which the efforts of traditional learning groups may go wrong. Group members sometimes seek a free ride on others' work and the students who are stuck with doing the all of the work become resentful (Peterson, Wilkinson, & Hallinan, 1984). High ability group members may take the important leadership role that benefit themselves at the expense of the lower achieving group members. Since the person who talks and explains is the one who learns the most, the less able group member may flounder academically (Rottier & Ogan, 1991). Group work may also break down because of divisive conflicts, power struggles, and pressures to conform.

The barriers to effective group learning are avoided when the groups are properly structured to enhance cooperative efforts. Effective cooperative learning occurs

when the essential components are structured within the cooperative lessons (Johnson, Johnson, & Holubec, 1991). For example, the students must perceive that they are in a sink or swim together situation where they are working toward the same common goal, achieving mastery of a subject (Johnson, Johnson, & Holubec, 1991). The teacher structures the weekly lessons so that the students are aware of their interdependence.

The students must be taught interpersonal skills necessary to be successful in a group and the teacher monitors the use of these skills in each group. These skills are taught, reviewed, and practiced during each cooperative lesson. There is a hierarchy of interpersonal skills and the skills chosen by the teacher reflect the needs of each class (Johnson, Johnson & Holubec, 1991).

In addition to being interdependent,the students must realize that they are individually accountable for the material learned and will receive an individual grade reflecting this knowledge (Rottier & Ogan, 1991).

The students must also reflect about how their group functioned, how well they worked together, and what their group learned. This is essential in order to improve the students' interpersonal skills, their ability to resolve conflicts, their group participation, and their retention of academic material (Johnson, Johnson, Holubec,& Roy, 1984).

When implemented in this manner, cooperative learning can become a powerful learning and community-building experience for both students and teachers. A cooperative learning environment, structured with great care, has the potential to transform classrooms into places that will prepare students for their future in the workplace (Johnson, Johnson,& Smith, 1991).

Types of Cooperative Learning Groups

The three types of cooperative learning groups are formal, informal, and base groups. Formal groups are the most structured and remain together until a long term assignment is completed (Johnson, Johnson, & Holubec, 1991). Informal groups are short term, less structured groups (Johnson, Johnson, & Holubec, 1991) as opposed to base groups which remain together for a semester and members take on assigned roles throughout this time period.

The formal groups are conducive to Jigsaw II, Teams-Games-Tournament (Slavin, 1983), and Learning Together (Johnson, Johnson, Holubec, & Roy, 1984) because these specific methods require the groups to learn content and compete with other groups. For example, Jigsaw II requires students to begin by reading a common text then each student is given a separate topic on which to become an expert. Then students who have the same topic meet in groups for

discussions after which they return to their formal groups to teach what they have learned. Each group is placed in competition with the other groups and team points are awarded for accomplishments (Slavin, 1983). Another formal group activity is the Teams-Games Tournament which differs only slightly from Jigsaw II. This method keeps the formal groups together for the teaching and competition. Members teach and quiz each other over the material which will be used in the team competitions. Since the competitions are ongoing until the unit of material is covered, formal groups, which remain together for an extended period of time, are utilized. Another formal group method is Learning Together. In this method, heterogeneously grouped students work together to complete an assignment for which only one finished assignment, representing the entire group would be turned in.

Informal groups are short term, less structured groups (Johnson, Johnson, & Holubec, 1991). Effective temporary assignments for these informal groups are worksheet checkmates, computer groups, writing response groups, composition pairs, focus trios, homework checkers, and test reviewers. Each of these cooperative strategies are quick groupings and short assignments.

Although the formal and informal groups are created according to a time frame, the cooperative learning groups

could also be defined by roles, structure, and procedures for each group. For example, group competitions such as Student Teams-Achievement Divisions and Team Assisted Individualization are most appropriate for base groupings (Slavin, 1983). These groups function to provide support, encouragement, and assistance in academic achievement for its members (Johnson, Johnson, & Holubec, 1991). The Student Teams-Achievement Divisions group students of various abilities to learn material and compete with students from other groups on quizzes (Good & Brophy, 1987). Time is not the major concern in this grouping, but the student roles and abilities are the primary concerns. Similarly, Team Assisted Individualization is a method requiring grouping according to roles and abilities. For this activity, teachers present concepts rather than computational procedures after which group members are given worksheets with skill problems. Each team member helps others with their worksheets. This activity causes the students to work both independently and interdependently to complete the assigned work (Slavin, 1989).

Teacher Decisions Prior to Grouping Students

The students' academic and social successes in cooperative learning settings depend upon the teachers' carefully planned implementation of programs (Hilke, 1990;

Johnson, Johnson, & Slavin, 1989). For example, teachers must make decisions prior to moving the students into groups. Johnson, Johnson, and Holubec (1991) suggest the following considerations for the teachers before forming groups: choose group size, pick students for the groupings, arrange the room, assemble materials, and assign student group roles. After these decisions have been made, teachers must choose a task or tasks and highlight the desired outcomes of the project (Hilke, 1990). To insure a desired task follow-through, group members must move from teacher dependence through student independence, and towards more group interdependence (Covey, 1990).

These stages of progression by the students are accomplished with the help and direction of the teacher. The students are dependent upon the teacher for task instructions and requirements. After receiving the instructions, the students become more independent during the individual internalization of the task requirements because each student interprets the instructions then shares the analysis with the group. Then the students become more interdependent because the task requires the whole groups' efforts for completion. Since the assignment required all parts for a completion grade, the group members are dependent upon each other for the total project. Although group members work together, each member is individually accountable, both

academically and socially (Johnson, Johnson, & Holubec, 1991).

Changing Role of the Teacher

The progressive stages of student development also alter the teacher's role in the classroom. After the room is arranged, the students are placed in groups, and the task is explained, the teacher's roles change from decision-makers and information-givers to facilitators whose duties include monitoring, intervening, and analyzing group achievements (Johnson, Johnson, & Holubec).

While monitoring the groups, teachers must be certain that all members are participating, and help any groups needing clarification on goals or tasks (Hilke, 1990). Teacher interventions can be used to redirect inappropriate student behavior and maximize student time-on-task (Cohen, 1986). Not only do teachers intervene to correct undesirable behavior, but also they may reinforce suitable behaviors such as group cooperation, equal participation, and group evaluation upon task completion (Johnson, Johnson, & Holubec, 1991; Kagan, 1990).

Time must be provided after the completion of a group task for an analysis of the completed project and of the group functioning (Hilke, 1990). A final, important role for teachers is the evaluation of group products. The students are graded on mastery of the content and the manner in which they worked together (Johnson, Johnson, & Holubec, 1991).

Cooperative Skills for Students

If cooperative learning experiences are to be successful for both the learners and teachers, group skills must be practiced by the teachers in a staff development setting prior to presenting these methods in the classroom (Bassett, 1991; Joyce & Showers, 1988). Bassett (1991) suggests that teachers be given the opportunity to practice the actual skills involved in a cooperative classroom during the staff development session. Then upon returning to the classroom, the teachers would present the cooperative group roles and skills in a direct teaching setting prior to placing students into groups (Johnson, Johnson, & Holubec).

Johnson, Johnson, Holubec, and Roy (1984) suggest four levels of cooperative skills for students: forming, functioning, formulating, and fermenting to which Slavin (1983) adds group mastery. During the forming level, students learn skills required to organize groups and to establish appropriate behaviors (Johnson, Johnson, Holubec, & Roy, 1984). Components addressed in the forming level include: working without disturbing others, remaining in the group, using proper voice levels, participating, and addressing each other respectfully (Cohen, 1986; Johnson, Johnson, Holubec, & Roy).

To provide for effective working relationships between group members, all members need to be taught group functions

(Sapon-Shevin, 1990). At this level, the members learn to give directions, to be supportive of each other, to question, to explain, to clarify, and to operate synergistically (Covey, 1990; Johnson, Johnson, Holubec, & Roy, 1984). The effective teaching of these group functioning rules insures minimal off-task behavior (Cohen, 1986).

Once the students are skilled in the functioning of groups, they are provided with processes of understanding the material in the formulating level (Johnson, Johnson, & Holubec, 1991). Such concepts as summarizing material aloud, adding to each member's summary, spiraling the previous knowledge with current material, and creating drawings or pictures for clarification of ideas are key elements for this mastery (Johnson, Johnson, Holubec, & Roy, 1984; Smagorinsky, 1989). Group members are taught to probe for more information and to challenge each other's ideas in the fermenting level (Johnson, Johnson, & Holubec, 1991). At this point in the groups' cognitive development, the members begin to rationalize and integrate their concepts by elaborating answers, checking the group's outcomes with instructions, and providing feedback on the group work (Augustine, Gruber, & Hanson, 1990).

Group Mastery

Specific preparation of the students prior to placing them in cooperative learning groups is necessary for effective group work. Two aspects of preparation are

important: preparation for a specific task and preparation for the social roles and behaviors needed in a group setting (Golden, 1991; Rapp, 1991; Stodolsky, 1984). These social roles and tasks should be explained in the classroom setting most familiar to the students, such as a direct teaching (Rapp, Stodolsky).

Students are introduced to the concept of group mastery after the presentation of student cooperative skills. Group mastery occurs when common group goals are reached and rewards are given based on the members' achievement (Niehuff & Mench, 1991; Slavin, 1983). Slavin (1983) presents evidence on the relationship between group mastery and rewards when the results of groups, schooled in proper learning skills, are compared to groups equipped with the same skills but offered no rewards. These rewards lead to group members helping each other master the material causing a greater degree of individual learning (Bempechat, 1989; Eldredge, 1990). Students in the cooperative learning settings have higher mastery levels than in individualistically-oriented settings (Calderon, 1989; Slavin, 1989). High achievements of the group members do not depend upon the level of each student; all students are required to digest, then verbalize perceptions of the material, causing longer retention and greater achievements in the application of newly acquired knowledge (Dewey, 1933; Smagorinsky, 1989).

Narrowing the Performance Gap Between Student Populations

The setting for cooperative learning groups enables students to interact freely, virtually eliminating any preset societal barriers (Johnson, Johnson & Holubec, 1991; Joyce, 1991; Reeves-Keeler, 1990). This openness towards learning helps narrow performance gaps between student populations, permitting students to experience successes (Braddock, 1990; Cohen, 1986; Phelps, 1990).

A factor in the decision to use cooperative learning to improve student achievement is often based on related research. Robert Slavin (1989) compared achievement effects of cooperative learning with achievement effects of individualistic learning. Students in heterogeneous groups improved academically in cooperative settings better than similar populations in individualistic settings (Slavin, 1989). In Texas, for example, several school districts such as Paris, Mount Pleasant, Joshua, Grosbeck, and Carrollton Farmers Branch are using cooperative learning as a primary means of increasing student achievement in cooperation with the Partnership School Initiative.

Teacher Staff Development on Cooperative Learning and Student Achievement Gains

If cooperative learning is to be used to aid in student achievement, a staff development program for the teachers

should be used for the teaching of the different cooperative learning methods. Johnson, Johnson, and Holubec (1991) recommend teacher training and teacher participation in cooperative learning strategies before classroom implementation. Slavin (1989) explains the consequences of adopting cooperative learning without training in the effective methods of group learning such as student and teacher disorganization resulting in ineffective lessons.

An appropriate staff development model for cooperative learning should include several areas such as district commitment, teacher commitment, ongoing on-site staff development, coaching, lesson sharing, school-wide implementation, and administrative leadership and approval. For any staff development to be successfully implemented, the school district must be prepared for a long term commitment (Bassett, 1991; Joyce & Showers, 1988). During the first year of developing a cooperative learning campus, other staff development efforts should be limited to insure time to review and refine cooperative learning strategies.

The teachers should be committed to implementing cooperative learning in their classrooms after participating in the training. The teachers will help each other in this commitment by utilizing peer coaching where teachers go into each others' classrooms to observe the cooperative learning

lessons (Acheson & Gall 1992). After these observations, the teachers will meet and share data collected during the observation which will help the teachers see the need for any changes or reaffirm their progress. The peer coaching can help create an environment in which the teachers are working together to master a new teaching process (Cawelti, 1993; Joyce & Showers, 1988). During the lesson-sharing sessions, teachers make decisions on possible changes needed, while both teachers plan their lessons together and decide on the next observation dates as well as what type of data will be collected (Acheson, & Gall, 1992).

The instructional leaders of the school plan ongoing staff development to supplement teachers' peer coaching. The sessions can be two-fold, focusing on correcting staff-wide problems by introducing new strategies such as cooperative learning, followed by collegial coaching strategies (Joyce & Showers, 1988).

Partnership School Initiative

As part of an effort to reduce the gap in achievement between the various subgroups of the student population, the Texas Education Agency (TEA) developed partnerships with eighty-three schools (Meno,1992). A liaison for each region worked with the schools and reported to TEA. The Partnership Schools Initiative (PSI) was given the flexibility in designing programs to improve student

learning and also received waivers from state laws and rules.

There were more than sixteen hundred applications for the program from which eighty-three schools were chosen. Each of the state's twenty regional service centers recommended two schools and one alternate for the program through a selection process that included a screening committee whose members represented potential partners and the education community. Schools were selected on the basis of several criteria: the degree to which the school could demonstrate a commitment to improve student performance, the level of staff participation and commitment to become a partnership school, the degree of willingness to question and modify the existing public education system, the willingness to participate in a partnership with the state regional education service centers and other parties, the willingness of the schools to use performance indicators or other measures to determine student improvement and to identify areas in need of improvement, and the degree of understanding of the need for correlation between identified student needs and areas to be improved (Meno,1992).

As part of the program, the Partnership Schools developed a plan to refocus their efforts to bring about improved student achievement. These plans were developed by July 1, 1992 and implemented the following September.

The outcomes for all Partnership Schools included: overall student achievement; elimination of barriers to student achievement, increased achievement expectations for all students, improved relationships among all partners, the opportunity for schools to become teaching and learning laboratories, available data for use in future planning and implementation, waivers to help eliminate barriers to student achievement, and school accountability to the parents of all students (Meno, 1992).

For the purpose of this paper, Vivian Field Junior High School, a PSI school, was chosen. The staff of Vivian Field Junior High School developed a plan for increasing student achievement which included campus-wide implementation of cooperative learning coupled with collegial coaching by the teachers in all content areas.

CHAPTER III

Procedures

The purpose of this paper was to design and implement a staff development program for fifty secondary school teachers on strategies for reaching the Carrollton Farmers Branch I.S.D. Partnership School's Goal. The goal was to reveal initial gains in student achievement, and to close the performance gap among student populations, through cooperative learning in all subjects. In this paper, the primary emphasis was school-wide implementation of cooperative learning strategies followed two weeks later by three collegial coaching sessions to observe cooperative learning groups, and then to discuss initial student achievement gains.

On February 8, 1993, two weeks prior to the staff development, a Texas Assessment of Academic Skills (TAAS) Summary Report was given to both school counselors. The information on the 1992 TAAS results was needed so that the school's ethnic and socioeconomic populations' results could be recorded (See Appendix A). These forms also allowed teachers to see the data graphically, revealing the gaps between different student populations (See Appendix B). Examples of data from the summary report were a 73% mastery for Anglo students compared with a 25% mastery for African-American

students and a 30% mastery for Hispanic students. In the area of socioeconomics, a 31% mastery occurred in the economically disadvantaged group compared to 69% mastery by those students not economically disadvantaged. Since the Partnership School Initiative's primary emphasis is narrowing achievement gaps among student populations, the completed subgroup analysis form was the initial data distributed to all teachers prior to the staff development session. This form enabled the teachers to examine the data prior to the session, thus gaining an insight into the performance gaps currently existing at Vivian Field Junior High School.

In order to allow the teachers to participate in the agenda of the staff development program, a survey was distributed to them on February 1, 1993, three weeks in advance of the staff development program (See Appendix C). The results of the survey were used to determine the teachers' pre-existing knowledge of cooperative learning (See Appendix D). The teachers' responses ranged from little or no knowledge of cooperative learning to a great knowledge but little practice with cooperative learning. Some responses to the question about the frequency of group work included everyday to once a week. The majority of teachers realized that an important skill of a teacher in cooperative learning was to be a well planned facilitator. Finally, the teachers all had

different expectations from cooperative learning including more student accountability for their learning to greater overall student achievement.

The staff development was devoted to both lecture and participation. Lecture comprised about one fifth of the time while participation made up the rest of the day. At the staff development program on February 22, 1993 an introduction was given with an explanation of how cooperative learning can be effective in closing the performance gap among student groups. The importance of achieving the goal of a narrowed performance gap was stressed with a reference to the Texas Partnership Schools' Goal which includes a narrowed student achievement gap. Since the teachers had received the TAAS Summary Reports prior to the staff development, the TAAS Summary Reports were referred to once for approximately twenty minutes reminding the teachers of the achievement gaps between student populations. The author expected teachers to locate learning gaps and to use this information in grouping students once back in their classrooms (See Appendix B).

The fifteen minute lecture included information about the latest research available on academic achievement through effective implementation of cooperative learning such as Susan Black's (1992) research report in The Executive

Educator. For example, Black's research showed the increased student achievement in group learning compared to individualistic learning. The socialization necessary for successful groups, according to Black, carried over into other classes and seemed to promote the group concept throughout the school as groups of students interacted in other classes.

After the lecture with research findings on student achievement, techniques such as Jigsaw, Jigsaw II, Teams-Games-Tournament, and Learning Together were taught through group participation. Each technique was first explained then the groups practiced by role playing for thirty minutes on each technique. Some of the teachers asked for clarification of the instructions from their group while others took charge immediately and proceeded with the group assignments. After each role play the teachers were regrouped into one large group for a discussion of the new strategy. The teachers were surprised at how closely they resembled their students learning a new strategy. The author reminded the teachers how some of them had not understood the instructions and had asked the group for help while others had taken charge of the group immediately. The role playing seemed to cement the proper strategies for each new cooperative learning technique.

The author was looking for proper implementation of

the techniques during the participation section of the program. For example, during Jigsaw the teachers should have been listening to group members and explaining the material for which they were to become experts before returning to their base groups. Once back in the base groups, the author expected to hear clear explanations by each teacher to the base groups. The author did see teachers on task explaining their areas of expertise to their fellow group members who were listening and taking notes.

All teachers were given a handout representing strategies practiced in the session (See Appendix E). The last thirty minutes were devoted to a question and answer period about implementation of the cooperative learning techniques practiced in the session. Some of the questions related to the data to be collected showing student achievement. The author suggested that each teacher choose a form of data that he/she could agree upon with his/her collegial coach since the coach would be involved in the collection and analysis of such data. Another area of concern was which technique to implement first. The author again suggested that each teacher meet with his/her coach and make the decision, or meet by department and decide upon a lesson to implement department-wide.

Finally, the session concluded with a Likert Scale

evaluation of the staff development. Each teacher filled out an evaluation form (See Appendix F). Analyzing the survey, the author looked for the areas the teachers deemed effective and the areas needing more explanation and practice. Results indicated the program was relevant to the participants and they would like a follow-up session after the initial implementation. Some participants asked for time at the end of the program to meet by department in order to plan an initial cooperative learning lesson. The author made arrangements for the departments to meet for thirty minutes at the faculty meeting the week following the staff development program.

Areas requiring extra training will be addressed one-on-one with the individual teachers during department meetings and class visits. For example, the math teachers wanted help in arranging their rooms to accommodate both lecture and group work. Their concern was the number of students per group and the amount of notes which needed to be taken. The author attended the math meeting and suggested an arrangement for the desks such that all students had a view of the overhead.

A follow-up survey was sent March 8, 1993, two weeks after the staff development to access the amount of implementation of cooperative learning in each teacher's

classroom (Appendix G). From the survey, the author realized that the majority of the teachers were conducting cooperative learning lessons twice a week and the remainder were using groups once a week. Since the initial goal was to have all teachers using cooperative lessons twice a week by May, the author noted that the goal seemed attainable by May.

The author also followed-up with five selected classroom visits after the staff development session and found teachers implementing cooperative learning strategies. Teachers also visited three classrooms during their collegial coaching observations and helped each other in the implementation of and data collecting for cooperative learning.

Now that some of the processes are in place, the teachers will analyze initial achievement results of the students by collecting data on the students during the cooperative lessons. Although the staff development was the professional paper focus, the author will continue to make two classroom visits per week throughout the semester to observe cooperative learning lessons and to analyze data on student achievement. The teachers also will continue their collegial coaching sessions to refine the cooperative learning strategies and to collect and analyze initial student achievement gains.

The Partnership School Initiative runs for five years, so the goal of higher student achievement through a narrowed performance gap will continue to be the focus for the staff of Vivian Field Junior High School. With the implementation of cooperative learning aided by collegial coaching, the staff will be able to work cooperatively in pursuit of its goal.

CHAPTER IV

CONCLUSION

The achievement gap among student populations is becoming wider each year. A concern is the fate of the students who make up the bottom half of these statistics. If these students are able to improve their achievement scores through cooperative settings in the classrooms, perhaps they will remain in school and become successful adults.

The Texas Partnership School Initiative was created to give schools complete latitude in raising student achievement and in bridging the learning gaps among various student ethnic and socioeconomic populations. For the next five years, the staff of Vivian Field Junior High School in Carrollton Farmers Branch I.S.D. is committed to achieving the Partnership Schools' goal through cooperative learning and collegial coaching. There is an expectancy that all students will come up to the seventy percent mastery level on the TAAS tests. If the staff is able to create a cohesive group of teachers with collegial coaching, they can hopefully create a family of students and teachers with cooperative learning.

The skills learned in cooperative learning are the primary skills that businesses are wanting students to posses when they graduate from high school and apply for jobs. The ability to work with a group of people possessing different ideas to achieve a common goal is a valuable skill. The social interaction and positive reinforcement found in cooperative learning groups can promote a positive self image and a sense of belonging for the students. This positive self image can also help the low achieving student become more successful. In fact, the teachers have noticed an improvement in the number of students being prepared for class with proper supplies and proper homework following the school-wide implementation of cooperative learning.

As a Partnership School, the Vivian Field staff is able to have more than the state's allotted staff development days. The cooperative learning staff development session was one such session. The students were given a day off while the teachers attended the workshop on cooperative learning strategies on February 22,1993. The development of a session on cooperative learning was seen as necessary in order to begin the process of narrowing the achievement gap currently existing at Vivian Field. The enthusiasm during the cooperative learning session carried over into the classrooms and with coaching sessions, the staff has remained excited about the prospect of campus-wide implementation of cooperative learning across the next five years.

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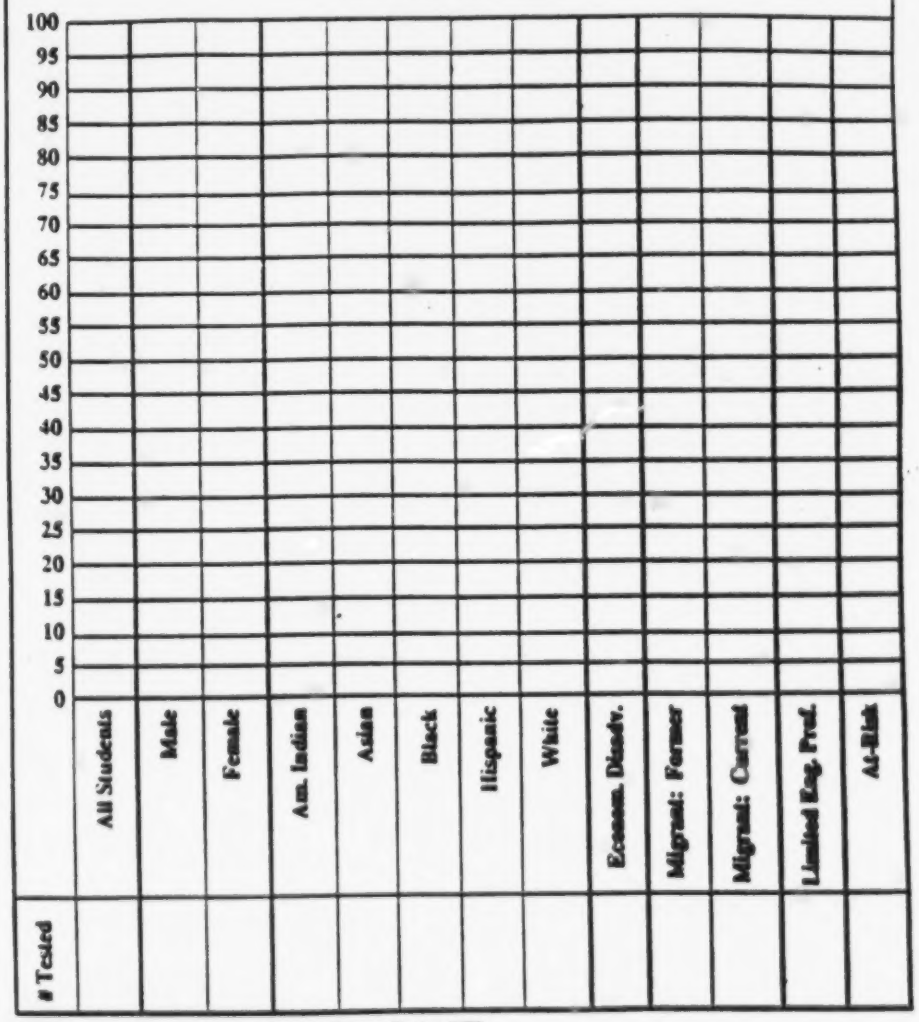
APPENDICES

Appendix A

District: _____ Campus: _____

TAAS Summary Report
Sub Group Analysis
All Tests Taken
Grade _____
19_____ - 19 _____



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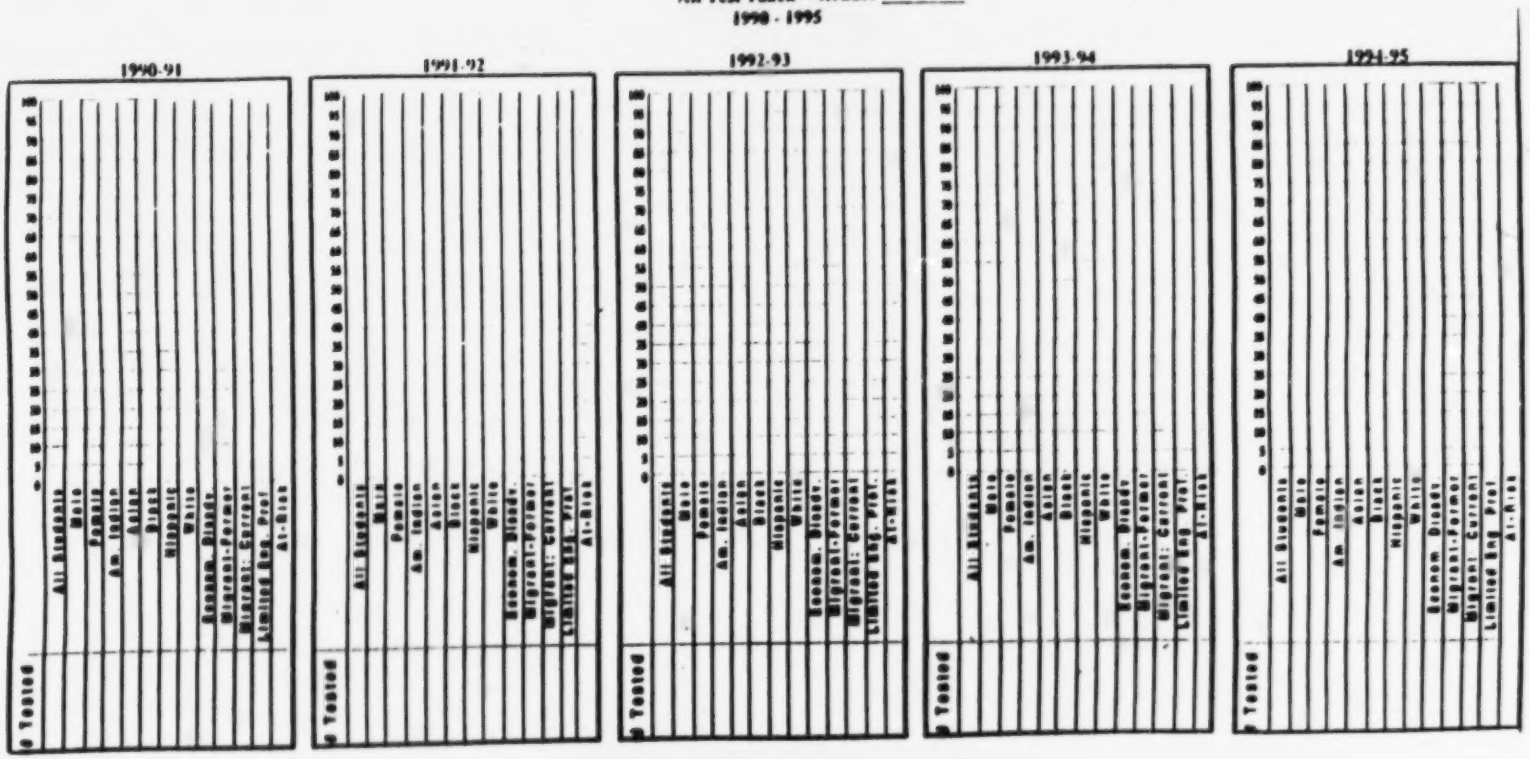
District: _____

TAAS Summary Report
Sub Group Analysis
All Test Taken -- Grade: _____
1990 - 1995

Campus: _____



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Appendix A

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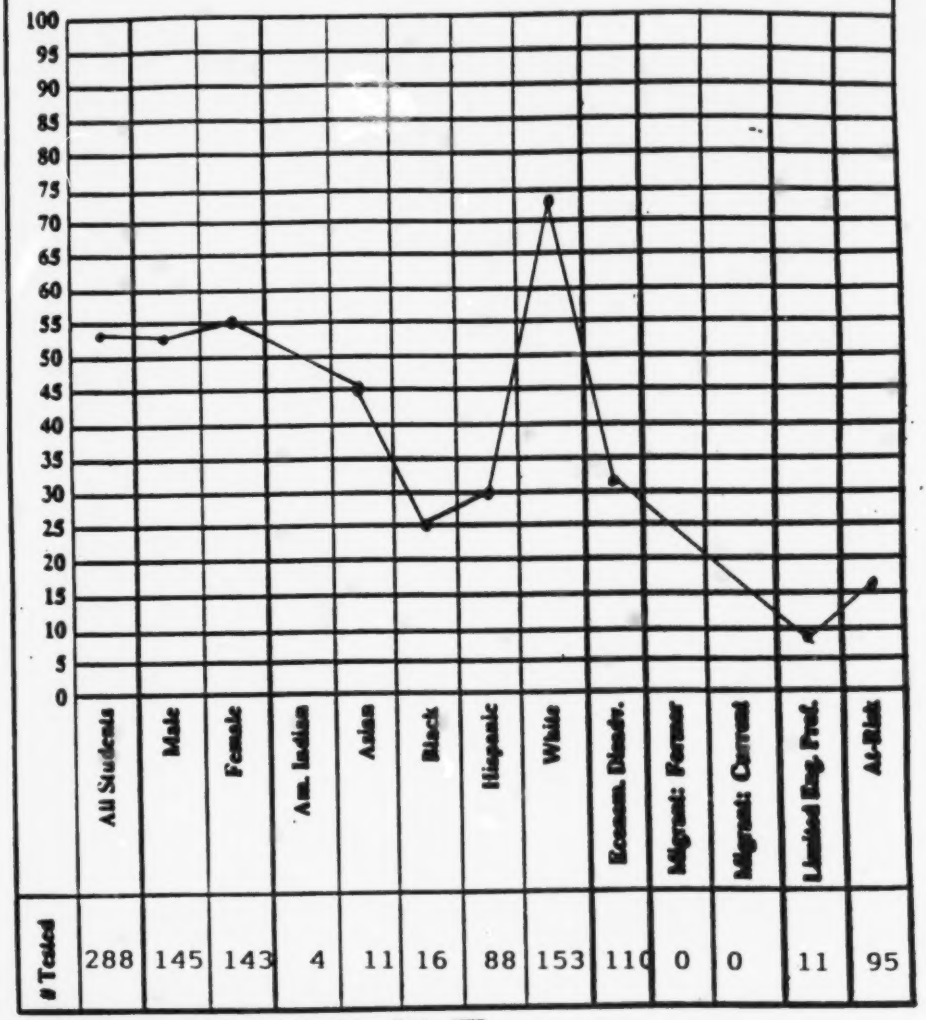
Appendix B

District: Carrollton Farmers Br. Campus: Vivian Field

TAAS Summary Report
Sub Group Analysis
All Tests Taken
Grade 7
19 92 - 19 93



	All Students	Male	Female	Am. Indian	Asian	Black	Hispanic	White	Econom. Disadv.	Migrant: Former	Migrant: Current	Limited Eng. Prof.	At-Risk
# Tested	288	145	143	4	11	16	88	153	110	0	0	11	95

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Appendix C

Cooperative Learning Teacher Survey

Please answer the following survey questions by February 8, 1993 and return to Kathy Cook at Vivian Field Junior High School. Your responses will help direct the focus of the staff development program on cooperative learning scheduled for February 22,1993. Thank you for you time.

1. How does a teacher begin group work?
2. What factors motivate students to learn in small groups?
3. How are groups formed, and how often should they be changed?
4. What activities are appropriate for small-group learning?
5. How frequently should group activities occur?
6. How are students held accountable and graded?
7. What types of physical room arrangements are used with small groups?
8. How is group work used to meet the needs of different types of students?
9. What outcomes do you expect from cooperative learning?
10. What do you perceive as the strengths and limitations of cooperative learning?
11. What are the most important skills of a teacher in cooperative learning?

Appendix D

Selected Teacher Comments from Survey

1. How does a teacher begin group work?
   * Give directions, then place into groups
   * Put into groups, then give each group a set of written instructions

2. What factors motivate students to learn in small groups?
   * Working with peers
   * Group help

3. How are groups formed, and how often should they be changed?
   * They are kept for an assignment, formed by teachers

4. What activities are appropriate for small-group learning?
   * Only discussion activities

5. How frequently should group activities occur?
   * Once, twice, three times a week

6. How are students held accountable and graded?
   * I don't know

7. What types of physical room arrangements are used with small groups?
   * Clusters of desks three or four together

8. How is group work used to meet the needs of different types of students?
   * Slower students can get help

9. What outcomes do you expect from cooperative learning?
   * More student accountability, higher grades

10. What do you perceive as the strengths and limitations of cooperative learning?
    * Students helping each other, students leaving other student out of discussions

11. What are the most important skills of a teacher in cooperative learning?
    * The teacher must be prepared and be a facilitator

Appendix E

COOPERATIVE LEARNING MODELS

Student Teams Achievement Divisions (STAD) (Slavin 1986)

* Four-member, heterogeneous learning teams; designed for well defined objectives.
* Direct instruction by teacher followed by work in student teams for mastery.
* Individual student quiz scores; then summed for team scores.

Teams-Games-Tournament (TGT) (DeVries and Slavin 1978)

* Like STAD but replaces quizzes with weekly three person tournament tables.
* Teams matched against others of similar ability.
* Student teams regrouped each week on individual performance.

Team Assisted Individualization (TAI) (Slavin 1984)

* Four-member, heterogeneous teams for math
* Teacher instructs homogeneous students from all groups; members go back to teams to work.
* Team members work on individual units at their skill level but help each other.
* Individual unit tests taken without team help; weekly team awards.

Appendix E

Jigsaw II (Slavin 1986)

* Four-to-five-member teams
* Students learn common material but become experts with members of other teams.
* Individual student quizzes with team results based on improvement.

Learning Together (Johnson and Johnson 1987)

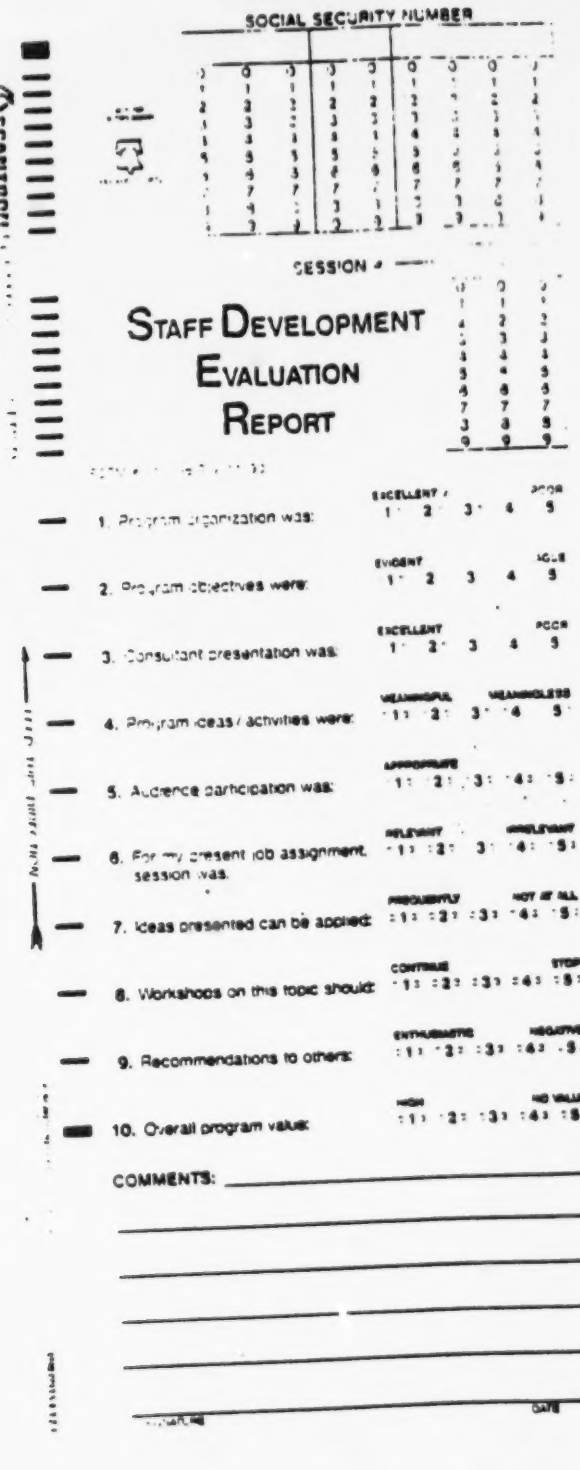
* Four-to-five-member, heterogeneous groups
* Total class instruction by teacher; student groups work on assignments.
* One final product for team score.

Group Investigation (Sharan and Sharan 1980,1989)

* Two-to-six-member student groups.
* Groups choose topic then assign individual tasks.
* Groups make presentations to entire class; receive group award.

Adapted from "How to Observe Cooperative Learning Classrooms", Carol B. Furtwengler, (1992) Educational Leadership, 49,(7), 60.

Appendix F



SOCIAL SECURITY NUMBER

SESSION #

STAFF DEVELOPMENT EVALUATION REPORT

1. Program organization was: EXCELLENT 1 2 3 4 5 POOR
2. Program objectives were: EVIDENT 1 2 3 4 5 VAGUE
3. Consultant presentation was: EXCELLENT 1 2 3 4 5 POOR
4. Program ideas / activities were: MEANINGFUL 1 2 3 4 5 MEANINGLESS
5. Audience participation was: APPROPRIATE 1 2 3 4 5
6. For my present job assignment, session was: RELEVANT 1 2 3 4 5 IRRELEVANT
7. Ideas presented can be applied: FREQUENTLY 1 2 3 4 5 NOT AT ALL
8. Workshops on this topic should: CONTINUE 1 2 3 4 5 STOP
9. Recommendations to others: ENTHUSIASTIC 1 2 3 4 5 NEGATIVE
10. Overall program value: HIGH 1 2 3 4 5 NO VALUE

COMMENTS: _____

_____

_____

_____ _____

_____

_____ DATE

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Appendix G

Cooperative Learning Implementation Survey

Please answer the following survey questions by March 12, 1993 and return to Kathy Cook. Thank you for your time.

1. I am conducting cooperative learning lessons ___ times a week.

2. By April, I plan to conduct cooperative learning lessons ___ times a week.

3. By May, I plan to conduct cooperative learning lessons ___ times a week.

4. I have completed ___ collegial coaching sessions.

5. In April, I plan to complete ___ collegial coaching sessions.

6. In May, I plan to complete ___ collegial coaching sessions.